### Indiana Academic Standards for English Language Arts & Mathematics

Roundtable Presentation April 21, 2014







"The Education Roundtable shall review and recommend to the State Board of Education for the Board's approval academic standards for all grade levels from kindergarten through 12 grade" IC 20-19-4-10







# Background

State Board of Education is required to "adopt college and career readiness educational standards by July 1, 2014."







## **Presentation Goals**

- Showcase the undeniable depths and quality in Indiana's process
- Highlight the strengths in the Indiana Academic Standards for English Language Arts and Mathematics







## **Presentation Goals**

- Provide Response to Important Themes
  - What makes these standards College and Career Ready?

– What resources will be created to support students, teachers and students in transition?







## National Expert

 Sujie Shin, Co-Director of Research of the Assessment and Standards Development Service (ASDS) program at WestEd & Assistant Director of the Center on Standards and Assessment Implementation (CSAI)









Collaboration with IDOE/SBOE through process

## Lead Evaluation Teams for 2 Full Days









### **Process**

- Objective ratings protocol
  - Aligned to Indiana's definition of college and career readiness
  - Review for clarity, rigor, specificity
- Reviewed by grade span and content area
  - Vertical alignment and progression of concepts







- Meet national and international benchmarks for college and career readiness
- Be aligned with postsecondary educational expectations
- Exemplify the highest standards in the United States
- Comply with federal standards
- Prepare Indiana students for college and career success
- Maintain Indiana sovereignty







# Meet national and international benchmarks for college and career readiness

- Foundation of nationally-reviewed and internationally benchmarked standards
- Critical lenses of alignment to:
  - expectations of higher education
  - needs of Indiana business leaders







#### Align with postsecondary educational expectations

- Stakeholders from IHEs were instrumental in the standards evaluation process
- Focused on progression of skills from K-12 into postsecondary
- Higher Ed leaders provide insight and alignment with:
  - Content expectations
  - Pedagogical/instructional practice best practices







#### **Exemplify the highest standards in the US**

- Building on foundation of previously reviewed/aligned standards allows for focus on clarity, rigor, progression
- Utilized research-based processes and best practices identified in standards review process







# Comply with federal standards to maintain flexibility waiver

- College- and career-readiness standards
- Systemic approach to implementation, support, assessment







#### Prepare Indiana students for college and career success

- Hoosier definition of college and career readiness
- Built upon representative Indiana stakeholdership
- Integrated approach to all levels of Indiana educational leadership







#### **Maintain Indiana sovereignty**

- Reflective of Hoosier goals
- Mindful of Hoosier needs
- Representative of Hoosiers







## Indiana's Process

- Multi-layered
- Multiple Perspectives
  - Educators, Subject Matter Experts, Parents, Community Members, National Reviewers and Representatives from College and Career
- Purposeful in Design
  - College & Career Ready Panel, Evaluation Team, Advisory Team, Technical Team
- Transparent & Inclusive







### Indiana's Process

Technical Teams, Advisory Teams, Evaluation Team & College and Career Ready Panel

- 156 Educators & Industry Leaders
- 6000+ Dedicated Hours
- 100 Individuals Testified
- 2,000+ Public Comments



7 Independent Reviews







# What did the Indiana Experts Do?

Common understanding of <u>definition</u> for College and Career Ready and <u>what is important</u> in a College and Career Ready standard.







### Definition of College and Career Readiness

"an individual has the knowledge, skills, and abilities to succeed in post-secondary education and economically-viable career opportunities"

Created by Representatives from:
Indiana Department of Education
Education Roundtable
Commission for Higher Education
Center for Education and Career Innovation
Department of Workforce Development







# What did the Indiana Experts Do?

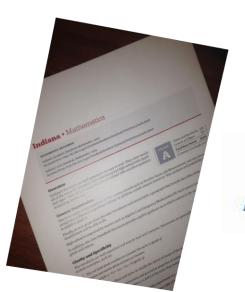
- Standards specify what students should know by content area and by grade level.
- Standards must define content knowledge and skills for all students that are explicit, measureable and show an increasing level of difficulty through grades
- Standards should combine content knowledge and skills into coherent and logical







# Evaluation of Multiple Sets of Standards









IN Academic Standards









# Indiana Experts: Guiding Principles for Standards Review

- Universal knowledge/skills & abilities that Indiana students should know and be able to do in order to be college and career ready.
  - Clear
  - High Rigor
  - Specific but not prescriptive
  - Grade Level Progress







### Indiana Experts: Cross-Section of Hoosiers

- K-12 educators, representing:
  - All regions of Indiana, urban, rural and suburban districts
- Higher education experts, representing:
  - Ball State, IU Bloomington, IUPUI, IPFW, Purdue West Lafayette,
     Indiana State, Univ. of Southern Indiana, Vincennes
  - Manchester University, U Indy, Valparaiso University, ITT Tech
- Global Leaders in business, representing various fields:
  - medical, industry, STEM, business, and service







### Indiana Experts: Sample Qualifications

- K-12: over 447 years of classroom experience; administrative experience; literacy and Math coaches
- Public comment: over 800 educators
- Indiana higher education and workforce:
  - Ph.D.s, Rhetoric and Composition; English; English Literature; Language Education
  - Ph.D.s, Physics; Biomedical and Electrical Engineering
  - Ph.D.s, Curriculum and Instruction, Educational Psychology, Elementary Education
  - Ph.D.s, Mathematics Education
  - M.A., Rhetoric and Composition
  - M.S., Mathematics; Chemistry
  - B.S., Computer Science







## Important to Note

- Each team built upon the other
- National reviewer input received at various stages
- Teams took input at each stage and integrated ideas







## In the Weeds of the Process



















# How a Standard Became Stronger

- Example is of Data Analysis in 4<sup>th</sup> Grade
  - These were minimally represented in Common Core, educators on Technical Team & Advisory Team felt it was an important area for improvement
  - Evaluation Team looked across NCTM, IAS2000, IAS2009 and Common Core







#### Phase One

- Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- Design investigations to address a question and consider how data collection methods
  affect the nature of the data set.
- Collect data using observations, surveys, and experiments.
- Represent data using tables and graphs such as line plots, bar graphs, and line graphs.
- Recognize the differences in representing categorical and numerical data (NCTM gr 3-5).
- Represent data on a number line in tables, including frequency tables (IAS 4.6.1 2000).
- Interpret data graphs to answer questions about a situation (IAS 4.6.2 2000).







#### Phase Two

Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, line graphs and bar graphs. Recognize the differences in representing categorical and numerical data.







#### Phase Three

Formulate questions that can be addressed with data and make predictions about the data Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, and bar graphs. Recognize the differences in representing categorical and numerical data.







#### Final Version

Formulate questions that can be addressed with data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, and bar graphs.







#### **Evolution of a Standard** - Grade 8/9-10 Reading: Literature

#### Phase One

Analyze a work of literature, showing how it reflects the heritage, traditions, attitudes, and beliefs of its author. (IAS 2006, 8th Grade)

Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature. (CCSS 2010, 9th-10th Grade)







#### **Evolution of a Standard - Grade 8 Reading Literature Standard**

Phase Two

Analyze a work of literature, showing how it reflects the heritage, traditions, attitudes, and beliefs of its author. (IAS 2006, 8th Grade)

Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature. CCSS 2010, 9th-10th Grade)







#### **Evolution of a Standard - Grade 8 Reading Literature Standard**

Phase Three

Analyze a particular point of view or cultural experience in a work of world literature considering how it reflects heritage, traditions, attitudes, and beliefs.

(IASCCR 2014, 8th Grade)







#### **Evolution of a Standard - Grade 8 Reading Literature Standard**

#### Final Version

Analyze a particular point of view or cultural experience in a work of world literature considering how it reflects heritage, traditions, attitudes, and beliefs. (IAS 2014, 8th Grade)







# Additional Strengths to Note

- EVERY source standard evaluated, discussed, edited as needed for College and Career readiness
- Inclusion of Strong ELA across Content Standards
- Media Literacy Standards
- Individual Math Course Standards
- Core Transfer Library Alignment
- College and Career Panel 100% Agreement







## Next Steps

- Indiana Department of Education implementation plans
  - Glossaries, reading exemplar text lists, rubrics that support transitions, designed around local need
  - Personalized Support for Implementation
  - Survey to Guide
  - Clear communication for stakeholder needs







## Next Steps

#### Implementation Plans

- Materials Aimed at Stakeholder Needs
  - Parents, Students, Community at Large
- Amendment to ESEA Waiver
- Assessment Alignment for College and Career Readiness
- Education Support and Adoption of Resolution to Recommend these Standards to the State Board of Education







# Standards Leadership Team/Education Roundtable Discussion

- Sujie Shin, Co-Director of Research of the Assessment and Standards Development (ASDS) program at WestEd & Assistant Director of the Center on Standards and Assessment Implementation (CSAI)
- Danielle Shockey, Deputy Superintendent of Public Instruction
- Dr. Molly Chamberlin, State Board Staff, CECI
- Sam Snideman, Director of Readiness and Alignment, Indiana Commission for Higher Education





